

# *The Wobbly Oscillator*



Hams Who Serve

**Cuyahoga Amateur Radio Society**

**July 2023**

**Volume 53**

**Number 7**



## *Another Great Field Day*

### *From The Prez*

#### **It's Not a Contest?**

"It's not a contest," one of the CARS Field Day participants emphatically insisted during this year's event while sitting down for a meal. Those of us who overheard the comment looked at each other and smiled a bit. The age-old controversy roared on. The Field Day event is listed under the schedule of ARRL contests. The rules are included in the list of contest rules. After all the log submissions are checked and recorded the results are posted in the various categories with those scoring the most points at the top. We battle bugs, the weather, QRM, QRN, and fatigue day and night giving our all to rack up points by making contacts. Every year our club anxiously awaits the results, and usually takes pride that we scored well and ended up high in the standings. Hmmm..., if it quacks like a duck, it must be a duck.

***But Field Day is more than a normal contest, way more.*** It's our opportunity to showcase our hobby at a public location and demonstrate it to those who are unfamiliar with it. We advertise the event by giving a time, place, and brief description of what we will be doing. Not only do we welcome the public, but we invite local safety force members, elected officials, and youth groups such as the scouts. Every year we have neighbors, friends, and relatives stop by and check us out. It is our custom to be accommodating to all visitors showing them what amateur radio is all about. We answer their questions and explain our hobby. We have literature to give them and show them photos of our activities; this year we put together a neat slide show. We offer the visitors refreshments and invite them to eat with us.

We demonstrate Single Sideband Phone, Morse Code, and Digital communication. Our agenda also attempts communications with the Space Station and satellites. We convey messages via radio to individuals who do not have radios to their homes. We seek and usually obtain publicity through the local media. We make radio contacts with radios powered by natural electrical generation such as solar or wind power. During the event we conduct an educational technical presentation.



As a team we prepare months in advance for the event. We begin the actual event Friday setting up antennas and tents. Saturday morning the set-up is completed as radios and generators are wired up and tested. At 2:00 PM the contest starts, and we begin transmitting. For the next twenty-four hours we operate, toil, sweat, eat, and rest as a unified group. During that period, lifetime friendships are created between acquaintances who barely knew each other. We all gain from the camaraderie. Field Day is way, way more than just a contest.

One of our most experienced hams and seasoned contesters, Metro, W8MET, stated it superbly-  
"Field Day is the Super Bowl of Amateur Radio." Truer words were never spoken.

## CARS Summer Picnic

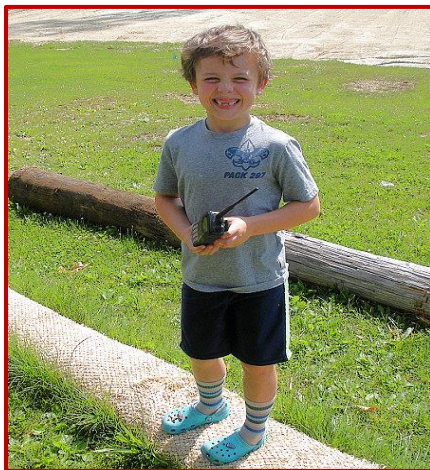
Mark Friday evening, August 18<sup>th</sup> on your calendars and plan to attend the annual CARS Summer Picnic. There will be food, ham radio activities, prizes, and games. The picnic is **FREE** for all CARS members, their relatives, and friends. We always have a great time, and this year after the pandemic interruption we plan to make our picnic the best ever.

We will again be at the Kiwanis pavilion in Independence. The details are on the CARS website and in the attached flyer. Please contact me at 440-525-6109 or [wt80@att.net](mailto:wt80@att.net) to make reservations.

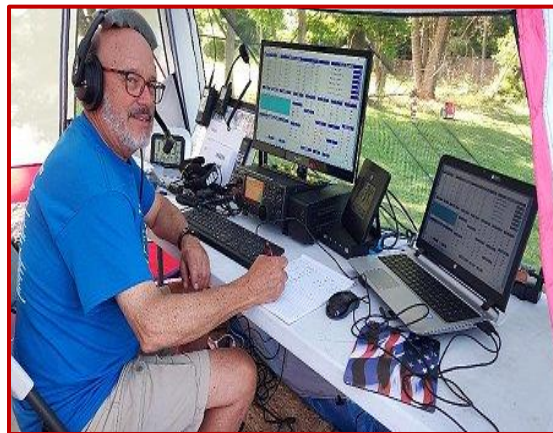
73, Toby, WT80



*Ron, K8RJH, and XYL Esther feast on the cuisine.*



*Cub Scout Grant Barstow made a SSB contact and had a blast.*



*John, NU8Y, did a great job operating SSB.*



*Joel, KE8YOD, shows his sister, Kalyn, what ham radio is all about.*



*Mark, KC8ESG, and his handsome dogs.*



*Bob, Simpson, and David setting up.*

# *June 2023 Meeting Minutes*

LOCATION - Harriet Keeler picnic area in the Brecksville Reservation

CALLED TO ORDER - The meeting was called to order by President Toby Kolman, WT8O, at 7:30 PM

PLEDGE OF ALLEGIANCE - Those present pledged allegiance to the flag of the United States of America.

INTRODUCTIONS - Those present introduced themselves; 17 attendees, including 3 guests, attended the meeting.

SEPTEMBER MINUTES - The May minutes were approved as published in the WO.

TREASURER'S REPORT - Bob, K8RGI, reported on the club's financial situation. No issues or concerns were identified.

*Some of the group converse before the June meeting.*



**WELCOME  
NEW MEMBER**

**JOEL  
HURLBERT  
KE8YOD**

PRESIDENT'S REPORT - Toby, WT8O, reported the following:

- Vote on new members-Perry Trunick, KB8AYQ, and Mark Huber, NO8J.
  - The group unanimously approved both new members!
- Positions needing to be filled.
  - Summer picnic/holiday party committee chairman - We need someone to volunteer for this if we want these events to continue. We have a committee in place to help but we need someone to volunteer to chair the committee. We queried the group on who wanted to attend these events, and the majority wanted to attend the events.
  - Secretary -
- WO - Thank you for the contributions, and open to suggestions on how to improve it.

VICE PRESIDENT'S REPORT - Ron Hollas, K8RJH, reported the following:

- **Dayton Hamvention... (Xenia)** The 2023 Hamvention set a record for attendance — pre and post-pandemic. According to Hamvention officials, 33,861 people visited the Greene County Fairgrounds, an increase of more than 2,000 from last year.



- ARRL, The National Association for Amateur Radio®, has been elected to serve on SAFECOM®. SAFECOM is a group of national thought leaders and officials within the emergency communications and response space that works to set standards used at every level. The program is managed by the Cybersecurity and Infrastructure Security Agency (CISA), an agency of the US Department of Homeland Security.
- The Federal Emergency Management Agency (FEMA) has released a final version (March 2023) of the National Incident Management System (NIMS) Information and Communications Technology (ICT) Functional Guidance. The guidance, which provides a framework for communications resources within incident management, officially includes support from amateur radio operators. The expanded Communications Unit (COMU) structure now includes the Auxiliary Communicator (AUXC) role, which covers personnel from services that provide communications support to emergency management, public safety, and other government agencies. This includes amateur radio.

- **Consider the Value of ARRL Membership**

- Long Standing, Growing Services, Public Service, Education, Advocacy, and Technology Access
- *Support CARS with your Membership renewal!*

- **ARRL Member Survey**

- The 12 Question Survey has been completed in May 2023. It Focused with member input for changes in the ARRL Fee structure.
- The results from the survey are being shared with the ARRL Board of Directors and anticipated to be available on the ARRL in late June. These responses will aid ARRL analysis and discussions, and ultimately help guide the future of ARRL.

- **Latest ARRL Podcast**

- Bob Witte, KØNR, joins the podcast to talk about how to prepare yourself and your station to join in the fun of VHF Contesting....A beginner-friendly event.

<https://blubrry.com/arrlontheair>

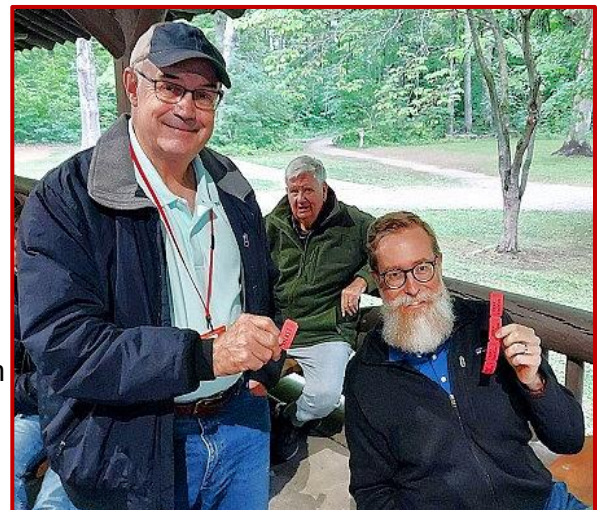
**ARRL Audio News** – For the latest in Amateur Radio News and Developments, Available and posted weekly every Friday.

SECRETARY'S REPORT - Alternate Secretary Matt Neely, NU8H, has nothing to report.

PUBLIC SERVICE - Eddie, KD8FTS, shared the following upcoming events which need volunteers:

- Shaker Dad's Day Run - June 18th
- Bike to the Bay - June 24th through June 25th - The event starts in Toledo and ends in Port Clinton. It's the same weekend as Field Day, so they always need volunteers.
- Pan Ohio Hope Ride - 4-day event. July 20-23rd. Hotels and food are covered for all volunteers.
- MS150 Buckeye Breakaway - August 12th through August 13th
- Tri Cleveland Rock Roll Run - August 12th

All event details can be found on the Event Support Website <https://n8esg.org/>.



Andy, KC8SCV, checks Matt's, NU8H, winning 50-50 ticket.

VE UPDATE - Metro, W8MET, shared that during the last test session, four people got their Technician licenses, and two people upgraded from Technician to General. The next VE session is Sunday, July 9th, at 9:15 AM.

PROGRAM COMMITTEE - Joe, KD8BAL, reported that:

- For today's program, Bob, K8RGI, will talk about Field Day and the CARS set up for Field Day.
- We need a presentation for July. If you have a topic you'd like to present, please get in touch with Joe, KD8BAL.

TECH COMMITTEE – Scott, AC8NW. No updates. Planning to troubleshoot some issues over the next few weeks.

REFRESHMENTS - Toby, WT8O, thanked Ron, K8RJH, for soft drinks, Matt, NU8H, for doughnuts, and John, NU8Y, for coffee.

OLD BUSINESS - Toby WT8O, led a discussion on the following:

- 10 Meter net - Lots of discussions last month on this topic. We are forming a committee to discuss this and develop next steps.

NEW BUSINESS - Toby, WT8O, led a discussion on the following:

- Eddie, KD8FTS, announced that you can purchase Hamvention Bus tickets for next year. Tickets purchased during 2023 will get the price for this year's bus. The price of bus tickets will go up in 2024. Reserve and pay for your seat in 2023 to lock in the lower price.

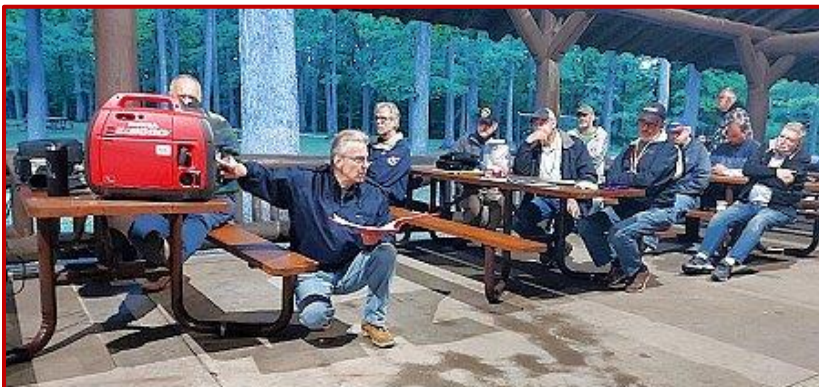
NEXT MEETING - The next meeting of The Cuyahoga Amateur Radio Society will be at the Harriet Keeler picnic area in the Brecksville reservation.

50/50 Drawing - Matt, NU8H, won the 50/50 drawing.

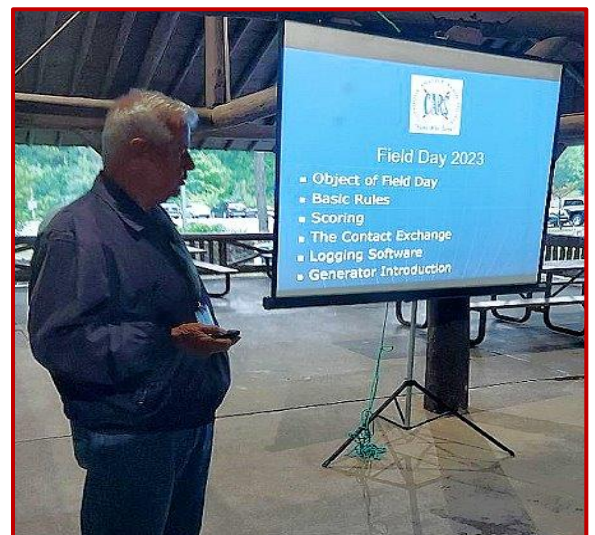
ADJOURNMENT - Toby, WT8O, adjourned the meeting.

After the meeting, Chuck, K8CVM, presented An Introduction to the NanoVNA, A handheld Vector Network Analyzer (VNA).

Submitted by Matt, NU8H, CARS Alternate Secretary



*Arp, K8ARP, demonstrates operation of the generator.*



*Bob, K8RGI, prepares the group for Field Day.*



# ***Field Day 2023***

## ***Bob, K8RCJ***

Field Day this year was another successful one. The weather could not have been better. We met at various times on Friday to shoot rope for antennas, put up the mast for the inverted V and canopy for the digital stations. The antennas for the CW station consisted of an 80/160 meter inverted V and a combination 40/20/15 meter dipole. The SSB stations each used an end fed long wire with one Ron Hollas, K8RJH, balun. This provided them with coverage from 160 to 10 meters. The digital stations used a GR5V, for 80 through 15 meters, an inverted V for 80 through 10 meters and end fed long wire for 160 meters with one Ron Hollas, K8RJH, balun. All the antennas seemed to give satisfactory performance.

This was the first year we provided our own food. Lunch on Saturday consisted of Subway sandwiches and chips. For dinner we had hamburgers, hotdogs, baked beans, and potato salad. The dinner was well attended with about 25 people. As usual we had a pot of soup for the overnight operators. This year it was stuffed pepper soup. It must have been good because it was gone by morning. For breakfast we had an egg casserole and cinnamon rolls. For lunch we ordered pizzas.

I think one of the things that I was most pleased with this year was the number of first time Field Day operators. We even had one operator, Joel Hurlbert, KE8YOD, who had just received his license two days before Field Day and spent the night getting on the air whenever he could.

Another thing that always amazes me is the number of people who help in setting up and tearing down the operation. We spend a day and half setting up, but everything comes down and is loaded into cars within an hour and half. We could not do Field Day without the support of club and non-club members.

Field Day is an event that is much more than a contest, but here are the numbers anyway. The CW station had 659 contacts, an increase of 53 over last year. The SSB stations had 425 contacts, a decrease of 15 from last year. The digital stations had 953 contacts, a decrease of 77 from last year. Total contacts were down from 2,076 last year to 2,037 this year. Total QSO points were 3,649 which is 63 points lower than last year.

Field Day 2024 is June 22<sup>nd</sup> and 23<sup>rd</sup>, only 359 days away.

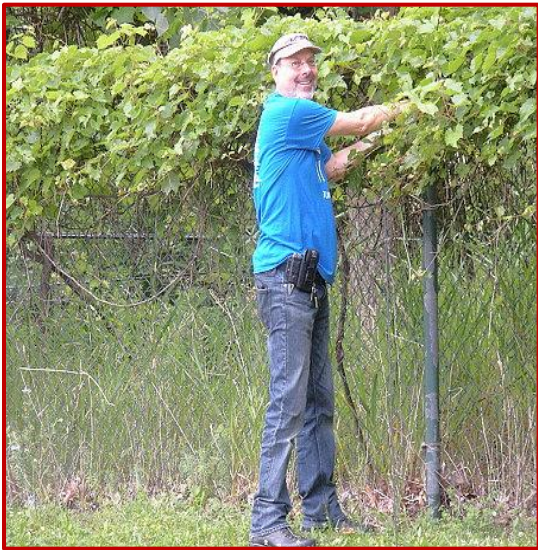


*Jim, KE8TLG,  
took this aerial  
Photo with his  
drone.*

*Getting set up.*







David, AC8TN,  
always smiling.



Andy, KD8SCV, wishes  
David, AC8TN, good  
luck.



Proudly displaying  
our banner.



Bob, KK8ZZ,  
was a major  
help.



Dinner time!



WT8O flippin' 'em.



# *Field Day 2023*

## *John, NV8Y*

Our CARS group recently completed our ARRL 2023 Field Day exercise. Thank you to all to who participated both in-person and from home. It takes a lot of planning and member participation to make it a successful weekend. Some members had been planning for this event ever since the conclusion of last year's event.

Our event took place at Calvin Park in Seven Hills, Ohio. We thank the mayor and the city for allowing us to use their area.

The physical set-up started on Friday evening and carried over into Saturday morning. We had tents set-up for digital communication, CW Morse code, and SSB (single side band) voice contacts. Antennas were extending up high into the trees and in seemingly all directions. Our transmitter stations were all powered by gasoline generators.

We transmitted non-stop from 2 PM on Saturday until 2 PM on Sunday. Some hams worked almost the whole time. Other hams worked a few hours and then rotated out, took a snooze, went home for a while, disappeared somewhere, but most eventually returned. There is something really unique about communicating with other hams across the country in the middle of the night.

Except for a few sprinkles Friday night, we were blessed with beautiful weather the whole weekend. The mosquitoes were not harassing us this year, all we had were some crazy beetles buzzing around after dark!

Thank you to everyone who was involved in planning and preparing our meals. We never went hungry or thirsty. We even had homemade soup in the middle of the night!

If you have never volunteered at Field Day before or if it has been some time since you have, consider joining us next year. Especially on SSB, we can get you trained and on-the-air very quickly. There is a written script you can follow if you are worried about what to say. Even if you can only stop by for an hour or two anytime during the weekend, join us and be a part of the experience. Help is especially needed for set-up and take-down activities.

See you next year at Field Day 2024



*The well-organized digital station kept humming along the full twenty-four hours.*



# *Amateur Radio Phonetics*

## *Ron, Kilo Eight Romeo Juliet Hotel*

If you have been operating voice modes on amateur radio, then there is a good chance that one has experienced a misunderstood letter, phrase or important detail exchanging call signs or receiving basic messages. Trying to communicate an exact address or reference a specific or unique name can be challenging to differentiate between letters that sound a lot alike. For example, when spoken aloud, the letters “D” and “B” can very easily be confused for one another. These small misunderstandings and misheard words can be especially problematic when there is any sort of static or distortion being received with your voice transmission.

Fortunately, there is a well-studied and time-tested voice technique used by both amateur and professional radio operators to overcome cultural and regional differences of “hearing” spoken language. The scientific study of language is called “Linguistics” and used to address the problem of misunderstood letters and words in radio voice reception.

Important subfields of linguistics used to study and derive a word-speech standard for voice radio operations include:

- Phonetics - the study of how speech sounds are produced and perceived.
- Phonology - the study of sound patterns and changes.
- Morphology - the study of word structure.
- Syntax - the study of sentence structure.
- Semantics - the study of linguistic meaning.

All this information and study was used to create the “NATO Phonetic Alphabet” widely used today for English speech intended over communications, messaging, or radio channel.

The goal was to institute a widely accepted phonetic alphabet to overcome two problems:

- Any miscommunication caused by technical difficulties.
- Create an alphabet accepted by many countries so that differences in pronunciation and spelling are avoided.

### **CARS**

### **Repeaters**

146.820 (-) PL Tone 110.9

Analog Repeater

Main Site – Brecksville

Receive Only Site – Brunswick

Receive Only Site – Shaker Hts.

Allstar Node 47067

EchoLink Node 343470 (K8ZFR-R)

WIRES X Node 91242 Room 01242

\*\*\*\*\*

443.825 (+) PL Tone 131.8

Digital Yaesu Fusion

Linked to 146.820 Repeater

Brecksville

\*\*\*\*\*

444.75 (+) PL Tone 131.8

Analog Repeater

Not Linked to Other Repeaters

Shaker Hts.

Phonetic alphabets were used in radio communications as early as World War I (1916), as aid to clarity of verbal communications. Police organizations soon followed with variants, a few of which are still in use today. Shortly after World War II, the International Civil Aviation Organization (ICAO), in consideration of the recognition of words in different languages, designed a phonetic alphabet that would be easy to understand by non-native English speakers, and adopted it for use in all aviation voice communications by all signatory countries. It was adopted in quick succession by the US military, NATO (North Atlantic Treaty Organization), and finally the ITU (International Telecommunications Union) in 1956.

Meanwhile, the "NATO Phonetic Alphabet" was developed in the 1950s to be intelligible (and pronounceable) to all NATO allies. It replaced other phonetic alphabets, for example the US military Joint Army/Navy Phonetic Alphabet ("Able-Baker") and several versions of RAF phonetic alphabets. It is sometimes inappropriately referred to as International Phonetic Alphabet, which is actually the official name of an alphabet used in linguistics created in the late nineteenth century.

The NATO phonetic alphabet is now widely used in business and telecommunications in Europe and North America and has been approved in 1956 by ICAO for use in international civil aviation. It has been adopted by the ITU, (many radio operators will refer to the NATO phonetics as ITU phonetics). Although it consists of English words, its letter codewords can easily be recognized by speakers of languages other than English.

So, why should amateur radio operators always use the NATO phonetic alphabet when phonetics is desired? Here are several good reasons.....

- Standard phonetic words are recognized more quickly and more reliably in all operating conditions. The idea that individuals can design better-understood words can lead to confusion and reveals a fundamental lack of understanding of the value of common standards.
- Amateur radio operators should develop habits that will serve us well in times of emergencies and use practices that are compatible with (rather than alienate) the public service agencies that we often serve.
- Amateur radio operators enhance international goodwill by not making non-native English-speaking amateur radio operators guess what words we are using (self-invented phonetic alphabets seem particularly popular in DX contacts).
- Words derived from foreign locations (e.g., "America", "Brazil", "Mexico", ...) not only invite confusion with the operator's location but are commonly spelled and pronounced differently in different languages.





- Using a self-invented phonetic word that is not carefully designed as part of a standard alphabet can be confused with other words. Probably the most common example is the "cute" phonetic "Kilowatt" for "K" call sign prefixes, which can be taken to be a "KW" prefix.
- Finally, in an era where Amateur radio band privileges are threatened by commercial and foreign interests, we can appear to be operators that are seriously interested in "... advancing skills in both the communications and technical phases of the art.

The NATO phonetic alphabet is a proven international standard for phonetics in use today, by the US military, civilian aeronautical and maritime, search & rescue groups, and public safety organizations. Virtually all these organizations require the use of this phonetic alphabet, because all their activities are involved in critical operations where any confusion in communications can compromise safety.

**FCC Rule Part 97.119(b)(2)** says, for station identification using a phone emission, "**Use of a standard phonetic alphabet as an aid for correct station identification is encouraged**".

The ARRL and many other national entities recommend NATO phonetics for Amateur Radio operation and as most Hams around the world recognize them.

Additionally, even as most Amateurs use VHF and UHF repeaters for local operation, one must remember that many of our systems may be linked via internet to worldwide destinations and the same discipline in phonics should always be followed as in HF voice exchanges.

Here is the full radio alphabet, which is also technically called the International Radio-Telephony Spelling Alphabet:

Alpha, Bravo, Charlie, Delta, Echo, Foxtrot, Golf, Hotel, India, Juliet, Kilo, Lima, Mike, November, Oscar, Papa, Quebec, Romeo, Sierra, Tango, Uniform, Victor, Whiskey, X-ray, Yankee, Zulu.

Numerals are referred to by common name, although 9 is "niner", which helps to avoid it being confused with 5.

For additional information, check out....

[http://www.wikipedia.org/wiki/NATO\\_phonetic\\_alphabet](http://www.wikipedia.org/wiki/NATO_phonetic_alphabet)

<https://www.internationalphoneticassociation.org/>



## What is the difference between ITU and NATO phonetic alphabet?

The ITU and NATO phonetic alphabets use the same alphabetic code words. However, they differ in numeric code word sets.

NATO uses the regular English numeric words (zero, one, two,... though with some differences in pronunciation)

ITU define compound numeric words (nadazero, unaone, bissotwo,...). In practice these are used very rarely, as they are not held in common between International agencies.

## *July VE Session*

The next VE testing session will be held Sunday, July 9th, at **9:15 AM\*** at the Old Elmwood Recreation Center, 6200 Pete Wisniesky Parkway, Independence 44131. Directions and a map are on the CARS website homepage. For information or an appointment please contact Metro, W8MET, at 216-520-1320 or [metro351@sbcglobal.net](mailto:metro351@sbcglobal.net)

As always, walk-ins are welcome.

**\*Please note time change to 9:15 AM.**

## *NASA Report* *Bob, KC8MRC*

The red super giant star in the constellation of Orion has been acting odd. Astronomers think that the star may be on the verge of going supernova, which will make it one of the brightest stars in the night sky.

## *Next CARS Meeting*

**Tuesday, July 11 - 7:30 PM**

**Thomas Wertman**

**Cleveland Ufology Project**

**Will present a program on:**

**UFOs seen around the world**

**And around our area**

**Harriet Keeler Picnic Area**

**Brecksville Reservation**

**Cleveland Metroparks**

**See Website for Details - [www.2cars.org](http://www.2cars.org)**



# July Net Sked

JUL 5 K8RJH  
JUL 12 KD8ACO  
JUL 19 AC8NW  
JUL 26 AC8TN

**Nets are run every Wednesday at  
9:00 PM on:**

**146.820 (PL 110.9)**

**443.825(+) PL Tone 131.8**

**Digital Yaesu Fusion**

**Linked to the 146.82 Repeater**

**EchoLink Node 343470 (K8ZFR-R)**

**Allstar Node 47067**

**WIRES X Node 91242 Room 01242**



*Peter, KA6SGT, adding to the CQ QSOs.*

## Honorary Members

Any person who by nature of outstanding or meritorious contribution to the furtherance of amateur radio and the ideals of the Cuyahoga Amateur Radio Society

Robert Check, W8GC

Elected 2/10/15

Thomas Wayne, WB8N

Elected 1/10/17

Dwaine Modock, K8ME, SK

Elected 5/9/17

Toby Kolman, WT8O

Elected 10/10/17

Jerry Smith, NW9H

Elected 5/8/18

Ron Borkey, K8VJG, SK

Elected 5/14/19

Ed Stevens, WB8ROK, SK

Elected 8/10/21



ZZZZZ





Mark, KC8ESG, just installed a Cushcraft R-9 at his home station.



Richard and Robert. Or is it Robert and Richard?



Terry, KB8DTC, shows onlookers the club slide show.



SHPD police officer Simpson Huston, N8UZF, operates SSB.



Mark, KC8ESG, racks up the Qs on SSB.



Mark, WJ8WM, made the scene with his fully equipped van. If he doesn't have it, you don't need it

The *Wobbly Oscillator* is a publication of the Cuyahoga Amateur Radio Society, P.O. Box 31264, Independence, Ohio, 44131-0264. Articles from this publication may be reprinted in any ham radio publication, if credit is given to this publication and the author, if known. All submissions should be emailed to: [wt80@att.net](mailto:wt80@att.net)



# 16<sup>th</sup> ANNUAL CARS PICNIC

**SAVE THE DATE:** Friday August 18, 2023 will be the day for CARS annual picnic. We will again be in the **Kiwanis Pavilion** behind the Independence Civic Center. We will serve hamburgers, hotdogs, brats, potato salad, Cole slaw plus all the trimmings. Desserts are welcome, feel free to bring one!

There will be a check-in on 146.820 with prizes starting at 5:00pm. We will have several door prizes for the winners of our drawings.

***The picnic is FREE to all CARS members, family & friends!***  
***All we ask is you tell us how many will be coming on or before Monday August 14th. Arrive anytime from 5:00pm, we plan to start eating about 5:30pm and food will be served till 6:00 or a little later if needed.***

There will be games and activities for the entire family.

**We need to know how many will be coming PLEASE Email your numbers to Toby, WT8Oat: [wt8o@att.net](mailto:wt8o@att.net) or call 440-525-6109 ASAP!**



## CARS 2023 Officers & Committees

### Audit

K8RJH \*\* WT8O, KD8FTS

### Audio/Video

AC8NW \*\*

### ARRL Liaison

K8RJH \*\*

### Awards

W8GC \*\* WT8O

### Christmas party & Summer Picnic

WT8O \*\*, K8ARP, KD8FTU, KD8FTV

### Field Day

K8RGI \*\*, WT8O \*\*, K8ARP, KD8SCV, AC8NW, AC8TN, WT8O, K8RJH

### 50/50

KD8SCV

### Fund Raising

W8GC \*\* K8RJH, KE8OZU, WA8GCR

### Hamvention Bus

KD8FTS \*\*

### Club Historian

WT8O \*\*

### License classes

KD8ACO \*\*, WT8O, K8SHB

### Media Representative

KD8SCV

### Membership

WT8O \*\* W8GC

### NET

WT8O \*\*

### Newsletter

WT8O \*\* 440-525-6109  
wt8o@att.net

### Programs at Meetings

KD8BAL \*\* KD8FTS, KE8OZU

### Property Custodian's

KB8DTC paper records,  
W8GC donations to sell  
WT8O Quartermaster

### Public Services

KD8FTS \*\*, K8ARP

### QSL Manager - W8BM

W8MET \*\*

### Refreshments at Meetings & Picnic

K8RJH \*\* pop, NU8H \*\* Donuts, NU8Y \*\* Coffee

### Scholarship

W8GC \*\* K8RGI, KE8OZU, WT8O, K8RJH

### Sunshine (welfare)

Andy, KD8SCV \*\* 440-886-0723

### Technical

AC8NW \*\* N8OVW, WJ8WM, KD8ACO, K8RJH, KB8DTC

### VE Exams

Metro, W8MET \*\* 216-520-1320

### Web Master/e-mail

W8GC \*\* KE8OZU

**\*\* chairman or co-chairman**

## 2023 Officers

### PRESIDENT

Toby Kolman WT8O 440-525-6109  
wt8o@att.net

### VICE-PRESIDENT

Ron Hollas, K8RJH, 216-379-7440

### SECRETARY

Matt Perlman, KE8OZU, 216-337-1540  
Alternate Secretary:

### TREASURER:

Bob Check W8GC 216-524-1750  
Alternate Treasurer: Bob Robbins, K8RGI

## Board Members & License Trustees

### Board Chairman:

Mark Moro WJ8WM 216-661-0342

### even year executive board 2 year term

AC8NW, KB8DTC, WJ8WM

### odd year executive board 2 year term

K8RGI, K8ARP, KD8FTS

### License trustee

K8ZFR  
WT8O

### License trustee

W8HBI, W8BM,  
W8GC



June 15, 2023